Appendix II: SEI Data Model[[1]](#footnote-1)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Alias** | **Description** | **Type** | **Length** |
| SourceName | Source Name | Field to identify the agency or organization where the data originates | Text | 12 |
| SourceDate | Source Date | Date the data was sourced or created | Date | 12 |
| Jursidiction | Jurisdiction | Internal MV field. MV department the data is associated with | Text | 20 |
| Location | Location | Used only when polygon originates from MV TEM. Internal MV field. Specific name of park or watershed | Text | 40 |
| Classification | Classification | Used only when polygon originates from MV TEM. Internal MV field. Type of ecological or administrative unit | Text | 30 |
| TEM\_PolyNbr | TEM Poly No. | Used only when polygon originates from TEM. Identifying number for the related polygon in the TEM dataset | Long Int |  |
| SEI\_PolyNbr | SEI Poly No. | Polygon Number - An identifying number for polygon being mapped | Long Int |  |
| SmplType | Sample Type | Field check of polygon - describes the level of field checking done on the current polygon | Text | 2 |
| PlotNo | Plot No. | Field Plot number | Text | 10 |
| ProjType | Project Type | Project Type - Indicates the type of mapping project | Text | 9 |
| Proj\_ID | Project ID | Project Identification - A unique identifier for each project | Text | 5 |
| EcoMap | Eco Mapper | First initial and surname of mapper | Text | 15 |
| EcoSec | Ecosection | Ecosection Label - Component of the hierarchical Ecoregion Classification system | Text | 3 |
| BGC\_Unit | BGC Unit | Combination of BGC Zone/subzone/variant | Text | 7 |
| SEDec\_1 | Ecosystem 1 Decile | Ecosystem Decile of Ecosystem Component 1 - Proportion of the polygon covered by ecosystem component 1, in deciles. | Short Int |  |
| SECl\_1 | Ecosystem 1 Class | Sensitive Ecosystem Class of Ecosystem Component 1 | Text | 2 |
| SEsubcl\_1 | Ecosystem 1 Subclass | Sensitive Ecosystem Subclass of Ecosystem Component 1 | Text | 2 |
| Strct\_S1 | Stuc Stg, Ecosystem 1 | Structural Stage of Ecosystem Component 1 | Text | 2 |
| StrctMod\_1 | Struc Stg Mod, Ecosystem 1 | Structural Stage Substage or Modifier of Ecosystem Component 1 | Text | 2 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Alias** | **Description** | **Type** | **Length** |
| Stand\_A1 | Stand Comp, Ecosystem 1 | Stand Composition Modifier of Ecosystem Component 1 - Differentiates forest stands based on coniferous, broadleaf and mixed stand composition | Text | 1 |
| SEDec\_2 | Ecosystem 2 Decile | Ecosystem Decile of Ecosystem Component 2 - Proportion of the polygon covered by ecosystem component 2, in deciles. | Short Int |  |
| SECl\_2 | Ecosystem 2 Class | Sensitive Ecosystem Class of Ecosystem Component 2 | Text | 2 |
| SEsubcl\_2 | Ecosystem 2 Subclass | Sensitive Ecosystem Subclass of Ecosystem Component 2 | Text | 2 |
| Strct\_S2 | Struc Stg, Ecosystem 2 | Structural Stage of Ecosystem Component 2 | Text | 2 |
| StrctMod\_2 | Struc Stg, Ecosystem 2 | Structural Stage Substage or Modifier of Ecosystem Component 2 | Text | 2 |
| Stand\_A2 | Stand Comp, Ecosystem 2 | Stand Composition Modifier of Ecosystem Component 2 - Differentiates forest stands based on coniferous, broadleaf and mixed stand composition | Text | 1 |
| SEDec\_3 | Ecosystem 3 Decile | Ecosystem Decile of Ecosystem Component 3 - Proportion of the polygon covered by ecosystem component 3, in deciles. | Short Int |  |
| SECl\_3 | Ecosystem 3 Class | Sensitive Ecosystem Class of Ecosystem Component 3 | Text | 2 |
| SEsubcl\_3 | Ecosystem 3 Subclass | Sensitive Ecosystem Subclass of Ecosystem Component 3 | Text | 2 |
| Strct\_S3 | Struc Stg, Ecosystem 3 | Structural Stage of Ecosystem Component 3 | Text | 2 |
| StrctMod\_3 | Struc Stg, Ecosystem 3 | Structural Stage Substage or Modifier of Ecosystem Component 3 | Text | 2 |
| Stand\_A3 | Stand Comp, Ecosystem 3 | Stand Composition Modifier of Ecosystem Component 3 - Differentiates forest stands based on coniferous, broadleaf and mixed stand composition | Text | 1 |
| Microsite | Microsite | Microsite - ecosystem representing < 10% of the polygon | Text | 4 |
| Condition\_SE1 | Condition, Ecosystem 1 | Condition assessment of the first component present in the polygon. A (best) to E (worst) | Text | 1 |
| ConditionNo\_SE1 | Condition (Num), Ecosystem 1 | Condition assessment for component 1 expressed as a number. 5 (best) to 1 (worst) | Short Int |  |
| Condition\_SE2 | Condition, Ecosystem 2 | Condition assessment of the second component present in the polygon. A (best) to E (worst) | Text | 1 |
| ConditionNo\_SE2 | Condition (Num), Ecosystem 2 | Condition assessment for component 2 expressed as a number. 5 (best) to 1 (worst) | Short Int |  |
| Condition\_SE3 | Condition, Ecosystem 3 | Condition assessment of the third component present in the polygon. A (best) to E (worst) | Text | 1 |
| **Field Name** | **Alias** | **Description** | **Type** | **Length** |
| ConditionNo\_SE3 | Condition (Num), Ecosystem 3 | Condition assessment for component 3 expressed as a number. 5 (best) to 1 (worst) | Short Int |  |
| Disturb\_1 | Disturbance (1st) | Disturbance (of greatest importance) | Text | 7 |
| Disturb\_2 | Disturbance (2nd) | Disturbance | Text | 7 |
| Disturb\_3 | Disturbance (3rd) | Disturbance | Text | 7 |
| Disturb\_4 | Disturbance (4th) | Disturbance (of least importance) | Text | 7 |
| Context | Context | Landscape context assessment for the entire polygon. A (best) to E (worst) | Text | 1 |
| ContextNo | Context (Num) | Landscape context assessment for the polygon expressed as a number. 5 (best) to 1 (worst) | Short Int |  |
| WSize\_SE1 | Weighted Size, Ecosystem 1 | Area of polygon covered by ecosystem component 1. Only completed for components > 2 deciles. This is an intermediate field used to calculate the Size grade only. | Double |  |
| Size\_SE1 | Size, Ecosystem 1 | Size grade for component 1. A (best) to E (worst). Based on SumWSize\_SE1 | Text | 1 |
| SizeNo\_SE1 | Size (Num), Ecosystem 1 | Size grade for component 1 expressed as a number. Based on SumWSize\_SE1 | Short Int |  |
| WSize\_SE2 | Weighted Size, Ecosystem 2 | Area of polygon covered by ecosystem component 2. Only completed for components > 2 deciles. This is an intermediate field used to calculate the Size grade only.. | Double |  |
| Size\_SE2 | Size, Ecosystem 2 | Size grade for component 2. A (best) to E (worst). Based on SumWSize\_SE2 | Text | 1 |
| SizeNo\_SE2 | Size (Num), Ecosystem 2 | Size grade for component 2 expressed as a number. Based on SumWSize\_SE2 | Short Int |  |
| WSize\_SE3 | Weighted Size, Ecosystem 3 | Area of polygon covered by ecosystem component 3. Only completed for components > 2 deciles. This is an intermediate field used to calculate the Size grade only. | Double |  |
| Size\_SE3 | Size, Ecosystem 3 | Size grade for component 3. A (best) to E (worst). Based on SumWSize\_SE3 | Text | 1 |
| SizeNo\_SE3 | Size (Num), Ecosystem 3 | Size grade for component 3 expressed as a number. Based on SumWSize\_SE3 | Short Int |  |
| QualityNo\_SE1 | Quality (Num), Ecosystem 1 | Quality assessment for component 1, combination of condition, landscape context and size ratings | Double |  |
| WQuality\_SE1 | Weighted Quality (Num), Ecosystem 1 | Quality rating (QualityNo\_SE1) weighted by the proportion of the polygon covered by component 1 | Double |  |
| QualityNo\_SE2 | Quality (Num), Ecosystem 2 | Quality assessment for component 2, combination of condition, landscape context and size ratings | Double |  |
| **Field Name** | | **Alias** | **Description** | **Type** | **Length** |
|  |  |  |  |  |
| WQuality\_SE2 | Weighted Quality (Num), Ecosystem 2 | Quality rating (QualityNo\_SE2) weighted by the proportion of the polygon covered by component 2 | Double |  |
| QualityNo\_SE3 | Quality (Num), Ecosystem 3 | Quality assessment for component 3, combination of condition, landscape context and size ratings | Double |  |
| WQuality\_SE3 | Weighted Quality (Num), Ecosystem 3 | Quality rating (QualityNo\_SE3) weighted by the proportion of the polygon covered by component 3 | Double |  |
| WCombQuality | Weighted Quality (Num), all | Total quality rating for the polygon, combining the weighted quality ratings for each component (WQuality\_SE1, WQuality\_SE2, WQuality\_SE3) | Double |  |
| Quality | Quality | Final quality grade for the polygon (based on WCombQuality) expressed as A (best) to E (worst) | Text | 1 |
| QualityNo | Quality (Num) | Final quality grade for the polygon (based on WCombQuality) expressed as a number – 5 (best) to 1 (worst) | Short Int |  |
| SE\_ME\_1 | | SE/ME, Ecosystem 1 | Status of component 1 as a sensitive, modified or non-sensitive ecosystem | Text | 3 |
| SE\_ME\_2 | | SE/ME, Ecosystem 2 | Status of component 2 as a sensitive, modified or non-sensitive ecosystem | Text | 3 |
| SE\_ME\_3 | | SE/ME, Ecosystem 3 | Status of component 3 as a sensitive, modified or non-sensitive ecosystem | Text | 3 |
| WSize\_SE1\_BASIC | | Area, Ecosystem 1 | Area of polygon covered by ecosystem component 1 | Double |  |
| WSize\_SE2\_BASIC | | Area, Ecosystem 2 | Area of polygon covered by ecosystem component 2 | Double |  |
| WSize\_SE3\_BASIC | | Area, Ecosystem 3 | Area of polygon covered by ecosystem component 3 | Double |  |
| PolyCom | | Polygon Comment | Polygon comments | Text | 250 |
| Comp1Lgnd | | Comp 1 Legend | Class and type (sensitive, modified or non-sensitive) of Ecosystem Component 1. Labeling field. | Text | 50 |
| Comp2Lgnd | | Comp 2 Legend | Class and type (sensitive, modified or non-sensitive) of Ecosystem Component 2. Labeling field. | Text | 50 |
| Comp3Lgnd | | Comp 3 Legend | Class and type (sensitive, modified or non-sensitive) of Ecosystem Component 3. Labeling field. | Text | 50 |
| Mod\_Type | | Modification Type | Type of modification observed | Text | 10 |
| LU\_Change | | LU Change | Land use change observed (i.e. from Sensitive/Modified Ecosystem to a different land use) | Text | 35 |
| LU\_Change\_Desc | | LU Change Description | Additional information about land use change | Text | 250 |
| SEI\_PolyNbr2009 | | SEI Poly No.2009 | Holds the original SEI Polygon Number. Provides a link between the update and the original 2009 SEI | Long |  |
| **Field Name** | | **Alias** | **Description** | **Type** | **Length** |
| AmendDate | | Amend Date | Records the date a polygon was fieldchecked (if it was different to the polygon creation date), or the date a polygon was deleted | Date |  |
| AmendComment | | Amend Comment | Notes if the date refers to deletion or fieldcheck | Text | 50 |
| AmendMapper | | Amend Mapper | Name of mapper who fieldchecked or deleted | Text | 15 |
| Change | | Change | Notes if this polygon was added or deleted between 2009 and 2014. This field summarizes the Mod\_Type field | Text | 3 |
| Adj09Qual | | Adjusted 2009 Quality | An adjusted Quality score for 2009, to account for errors identified in the original data. This field is used to calculate changes in Quality between 2009 and 2014. | Text | 5 |
| Q0914 | | Quality Assess 0914 | Indicates whether the polygon was assessed for Quality in 2009 and/or 2014 | Text | 5 |
| Comp1Lgnd\_Full | | Comp 1 Legend – Full | %, Class and type (sensitive, modified or non-sensitive) of Ecosystem Component 1. Labeling field. | Text | 125 |
| Comp2Lgnd\_Full | | Comp 2 Legend – Full | %, Class and type (sensitive, modified or non-sensitive) of Ecosystem Component 2. Labeling field. | Text | 125 |
| Comp3Lgnd\_Full | | Comp 3 Legend - Full | %, Class and type (sensitive, modified or non-sensitive) of Ecosystem Component 3. Labeling field. | Text | 125 |

Field Descriptions[[2]](#footnote-2)

**SourceName**

|  |  |
| --- | --- |
| **Code** | **Description** |
| Acres Int. | Acres International Consortium (GVRD Ecological Inventory) |
| Blackwell | B.A. Blackwell and Associates Ltd. |
| Diamondhead | Diamond Head Consulting Ltd. |
| FIS | FIS (GVRD Ecological Inventory) |
| Hemmera | Hemmera |
| MV | Metro Vancouver |
| Madrone | Madrone Environmental Services |
| Raincoast | Raincoast Applied Ecology |
| Timberline | Timberline Natural Resource Group |

**Jurisdiction**

|  |  |
| --- | --- |
| **Code** | **Description** |
| O&M | Metro Vancouver Operations and Maintenance Dept. |
| Parks | Metro Vancouver Regional Parks Dept. |
| Non MV | Non Metro Vancouver lands |

**SmplType[[3]](#footnote-3)**

|  |  |
| --- | --- |
| **Code** | **Description** |
| A | Aircall – data recorded from low-flying helicopter |
| D | Desktop verified - photo interpretation checked using another imagery source |
| E | Full plot – data recorded on FS882 forms from the ground |
| G | Ground inspection plot – data recorded on GIF cards from the ground |
| P | Photo interpretation – data interpreted from ortho/air photo |
| **Code** | **Description** |
| V | Visual inspection – abridged data recorded on plot card |
| VF | Visually inspected by FREMP |

**ProjType**

|  |  |
| --- | --- |
| **Code** | **Description** |
| NEM | Terrestrial ecosystem mapping without terrain |
| NEMNSS | Terrestrial ecosystem mapping with no bioterrain or structural stage |
| NEMSEI | Terrestrial ecosystem mapping (without bioterrain) and sensitive ecosystem inventory |
| SEI | Sensitive ecosystem inventory |
| TEM | Terrestrial ecosystem mapping |

**EcoSec**

|  |  |
| --- | --- |
| **Code** | **Description** |
| FRL | Fraser Lowlands |
| GEL | Georgia Lowland |
| NWC | Northwestern Cascade Ranges |
| SOG | Strait of Georgia |
| SPR | Southern Pacific Ranges |

**BGC\_Unit**

|  |  |
| --- | --- |
| **Code** | **Description** |
| CDFmm | Moist Maritime Coastal Douglas Fir Subzone |
| CWHdm | Dry Maritime Coastal Western Hemlock Variant |
| CWHxm1 | Eastern Very Dry Maritime Coastal Western Hemlock Variant |
| CWHvm1 | Submontane Very Wet Maritime CWH Variant |
| CWHvm2 | Montane Very Wet Maritime CWH Variant |
| MHmm1 | Windward Moist Maritime MH Variant |
| MHmmp | Parkland Moist Maritime MH Variant |
| **Code** | **Description** |
| CMA | Coastal Mountain-heather Alpine |

**SECl\_1-3**

|  |  |
| --- | --- |
| **Code** | **Description** |
| AP | Alpine |
| ES | Estuarine |
| FW | Freshwater |
| HB | Herbaceous |
| IT | Intertidal |
| MF | Mature Forest |
| OD | Old Field |
| OF | Old Forest |
| RI | Riparian |
| SV | Sparsely Vegetated |
| WD | Woodland |
| WN | Wetland |
| XX | Non SE or ME |
| YF | Young Forest |
| YS | Young Forest (small)[[4]](#footnote-4) |

**SEsubcl\_1-3**

|  |  |
| --- | --- |
| **Code** | **Description** |
| av | avalanche tracks |
| bd | broadleaf |
| bg | bog |
| bs | beaches and rocky shorelines |
| ca | canyon |
| cl | cliff |
| co | coniferous |
| cs | coastal herbaceous |
| ds | dwarf shrub |
| el | eelgrass |
| ff | fringe |
| fh | high bench floodplain |
| fl | low bench floodplain |
| fm | medium bench floodplain |
| fn | fen |
| gu | gully |
| hb | herbaceous |
| kr | krummholz |
| la | lake |
| md | meadow |
| mf | mudflat |
| ms | marsh |
| mx | mixed |
| pd | pond |
| pf | parkland forest |
| ri | river |
| **Code** | **Description** |
| ro | rocky outcrop |
| rs | reservoir |
| sd | sand dune |
| sh | shrub |
| sp | swamp |
| st | spit |
| sw | shallow water |
| ta | talus |
| tf | tidal flat |
| ts | tall shrub |
| vo | very old |
| vs | vegetated shoreline |
| wm | wet meadow |
| xx | non SE or ME |

**Strct\_S1-3** and **StrctMod\_1-3** (see below for further details on structural stage definitions)

|  |  |  |
| --- | --- | --- |
| **Code - Strct** | **Code - StrctMod** | **Description** |
| 1 | a | Sparse/cryptogam: Sparse |
| 1 | b | Sparse/cryptogam: Bryoid |
| 1 | c | Sparse/cryptogam: Lichen |
| 2 | a | Herb: Forb-dominated |
| 2 | b | Herb: Graminoid-dominated |
| 2 | c | Herb: Aquatic |
| 2 | d | Herb: Dwarf shrub |
| 3 | a | Shrub/Herb: Low shrub |
| 3 | b | Shrub/Herb: Tall shrub |
| 4 |  | Pole/Sapling |
| **Code - Strct** | **Code - StrctMod** | **Description** |
| 5 |  | Young Forest |
| 6 |  | Mature Forest |
| 7 | a | Old Forest: old |
| 7 | b | Old Forest: Very old |
|  | 99 | Attribute not assessed (from original TEM) |

**Stand\_A1-3**

|  |  |
| --- | --- |
| **Code** | **Description** |
| B | Broadleaf - > 75% of total tree cover is broadleaf |
| C | Coniferous - > 75% of total tree cover is coniferous |
| M | Mixed - Neither coniferous or broadleaf is > 75% of total tree cover |

**Disturb\_1-4**

(see *Field Manual for Describing Terrestrial Ecosystems* for additional codes).

Adjacent disturbance assessed within 15m of polygon

|  |  |
| --- | --- |
| **Code** | **Description** |
| A | Atmospheric related effects |
| Aesn | Heavy snow |
| Aw | Windthrow |
| B | Biotic (plant and animal) effects |
| Bb | Beaver tree cutting |
| Bd | Grazing |
| Bv | Aggressive vegetation |
| Bvbk | Aggressive vegetation - blackberry |
| Bvbs | Aggressive vegetation – Birch salal woodland |
| Bvrcg | Aggressive vegetation – reed canary grass |
| Dc | Disposal – chemical spill or disposal |
| Dg | Domestic garbage disposal |
| Fc | Overstorey crown fire |
| Fh | Fire - harvest related |
| Fn | Fire confirmed - natural |
| Fs | Fire suspected |
| G | Gap replacement |
| H | Harvesting |
| Hbad | Buildings or structures (adjacent) |
| Hbw | Buildings or structures (within) |
| Hla | Human log accumulation |
| Hmh | Modified hydrology, e.g., dikes, man-modified lake/pond |
| Hmv | Modified vegetation, e.g., agriculture, recreation fields (adjacent) |
| Ho | Harvesting - old |
| Hr | Harvesting - recent |
| **Code** | **Description** |
| Hrad | Roads (adjacent) |
| Hrw | Roads (within) |
| Hs | Harvesting - recent, selective |
| Htad | Trails (adjacent) |
| Htr | Tree removal – recent |
| Htw | Trails (within polygon) |
| Huad | Utility right-of-way (adjacent) |
| Huw | Utility right-of-way (within) |
| I | Inundation |
| L | Landslide |
| Lc | Forest harvesting – clearcut system |
| Le | Forest harvesting – selective system |
| Ll | Land clearing |
| Ls | Selective logging |
| Lt | Active talus |
| M | Plant or site modification effects |
| Mc | Herbicide (chemical) use |
| Mg | Planted or seeded to grasses |
| Mh | Planted or seeded to herbs |
| Ms | Planted or seeded to shrubs |
| Mt | Planted or seeded to trees |
| Mw | Mowed |
| P | Unknown (watersheds only) |
| S | Soil disturbances |
| Sa | Cultivation (agriculture) |
| Sc | Snow creep |
| Se | Excavation |
| **Code** | **Description** |
| Sf | Sidecast Fill |
| Shp | Soil disturbance – harvesting of peat |
| Sr | Road bed, abandoned |
| T | Terrain related effects |
| Ta | Avalanching |
| Tq | Rock quarrying (incl. open pit mines) |
| Ts | Terrain failures |
| V | Vehicle tracks |
| W | Water related effects |
| Wb | Windthrow by cutblock boundaries |
| Wd | Water table control (diking, damming) |
| We | Water table depression |
| Wi | Inundation |

**SE\_ME\_1-3**

|  |  |
| --- | --- |
| **Code** | **Description** |
| ME | Modified Ecosystem |
| SE | Sensitive Ecosystem |
| XX | Non SE, ME or YS ecosystem type |
| YS | Small patches of young forest (< 5 ha) (not an SE or ME) |

**Condition\_SE1-3** and **Context** and **Size\_SE1-3** and **Quality**

|  |  |
| --- | --- |
| **Code** | **Description** |
| A | Excellent |
| B | Good |
| C | Moderate |
| D | Poor |
| E | Very Poor |

**ConditionNo\_SE1-3** and **ContextNo** and **SizeNo\_SE1-3** and **QualityNo**

|  |  |
| --- | --- |
| **Code** | **Description** |
| 5 | Excellent |
| 4 | Good |
| 3 | Moderate |
| 2 | Poor |
| 1 | Very Poor |

**Mod\_Type**

|  |  |  |
| --- | --- | --- |
| **Code** | **Description** | **Additional Information** |
| A | Addition | New to the inventory (completely new polygon), e.g. newly created reservoir; restored habitat |
| AC | Extension | Extension of existing polygon as adjacent area should now be included (used for significant extensions only), e.g. adjacent area to an Old Field now old enough to be included |
| C | Change | Change in classification (from one SEI class to another), usually due to natural change. Possible that changes are human-caused (e.g. drainage in an nearby area) but not obvious. e.g. changes in water levels have resulted in shifts of different wetland types; beaver activity |
| CD | Change due to disturbance | Disturbance resulted in a change to a different class, e.g. wetland converted to a freshwater reservoir |
| CR | Reduced due to change | Change (as described in C above) resulted in a reduction in the size of a polygon. Change appears to be due to natural factors. e.g. changes in water levels have shrunk a wetland |
| D | Disturbed | Condition rating has been reduced due to disturbance |
| DC | Deleted due to Change | Natural change has resulted in the site no longer meeting the classification requirements for any classes, e.g. Old Field that has become too overgrown; beaver activity has flooded an area and killed the trees; |
| DD | Deleted due to disturbance | Area deleted from the SEI due to disturbance which resulted in complete or reduction in condition below the level of 'E'. Polygons retained as a separate layer. |
| **Code** | **Description** | **Additional Information** |
| DR | Deleted due to remnant assessment | Part of the polygon deleted due to disturbance. The remaining intact ecosystem is now so small as to not meet the size criteria for inclusion |
| I | Reinterpretation | Classification, components, or linework has been reassessed and amended. Usually due to an error in original data or improved imagery |
| IA | Reinterpreation - Addition | Polygon was reassessed and found to meet the standard required to be included in the inventory so was added (may be a fully new polygon or an extension to an existing one). |
| ID | Reinterpretation - Disturbance | The polygon was reinterpreted which led to a change in the disturbance coding |
| IDD | Reinterpretation - Deleted due to disturbance | Polygon was reinterpreted and found to be too disturbed to be included and so deleted from the inventory |
| IDR | Reinterpretation - deleted due to remnant assessment | Polygon was reinterpreted and part of it was found to be too disturbed and deleted from the inventory. The remainder of the polygon is now too small so does not meet the size criteria for inclusion. |
| IR | Reinterpreted - Reduced | The polygon was reinterpreted which led to a reduction in size |
| IRD | Reinterpretation - Reduced and Disturbed | The polygon was reinterpreted which led to a reduction in size and a change in the disturbance coding |
| N | No Change | No change observed since the last assessment |
| NB | No Change (Brief) | Brief scan of area rather than in-depth look (only for watersheds and large provincial parks in the north) |
| ND | Change in disturbance due to natural factors | Used for Old Field where condition has been reduced or improved due to natural succession |
| R | Reduced | Reduced in size due to disturbance |
| RD | Reduced and Disturbed | The polygon was both reduced in size and disturbed. |
| Any codes with an underscore between them, e.g. R\_C | Indicates two separate issues that apply to the same polygon. E.g. Reduced and Changed | EXAMPLES ONLY PROVIDED HERE. MORE EXIST IN THE DATABASE AND CAN BE UNDERSTOOD BY LOOKING AT THE INDIVIDUAL CODES |
| I\_R | Reinterpreted and reduction due to new disturbance | Reinterpretation of initial classification or linework. Plus reduction in size due to new disturbance |
| I\_DD | Reinterpreted and deleted due to disturbance | Reinterpretation of initial classification or linework. Since the original call, it was disturbed and so will be deleted from the inventory |
| I\_D | Reinterpreted and new disturbance | Reinterpretation of initial classification or linework. Plus reduction in condition rating due to new disturbance |
| I\_IR | Reinterpreted, and reinterpreted and reduced | Reinterpretation led to a change in classification or other attribute, plus the polygon has been reduced due to reinterpretation |
| I\_RD | Reinterpreted plus reduced and disturbed | Reinterpreation of initial classification or linework. Plus a reduction in size and condition due to new disturbance |
| IR\_R | Reinterpreted and Reduced, and reduced | The polygon was reinterpreted which led to a reduction in size (and potentially other changes e.g. classification). Plus the polygon was reduced due to new disturbance |

**LU\_Change**

|  |  |
| --- | --- |
| **Code** | **Description** |
| Agriculture | Land used for agricultural production. Includes cultivated field crops, farm infrastructure, crop cover structures, equestrian. |
| Cleared/Mowed | The area was cleared of vegetation or mowed and no further development has occurred or looks like it will occur. 2016 orthos were used to confirm that development had not occurred two years later. |
| Commercial & Services | Retail services, cultural and entertainment |
| Drainage | The area was cleared in order to install drainage features (ponds, culverts, etc.) |
| Extraction | Mineral, petroleum |
| Golf Course |  |
| **Code** | **Description** |
| In Transition | The area was cleared and development is in process but the land use is unclear |
| Industry | Includes work yards and buildings associated with industrial activities |
| Institutional & Community | Government, religious, medical, educational, correctional |
| Logged | Trees logged as part of forestry operations (includes the academic research forests) |
| Outdoor Storage | Areas cleared and now used to store equipment, vehicles, etc. Not clearly associated with another land use type. |
| Recreation | Playing fields, trails |
| Residential | Housing and associated driveways, lawns (immediately adjacent to the property) and small streets leading to the house. In cases where an area has been cleared and a residential development with roads etc. was added, the individual local roads were not separated and classified as Transportation & Communication, they are included within Residential. Larger roads were separated out. Larger areas of clearing that appear associated to a residence but are not clearly lawn are classified as 'Cleared/Mowed' |
| Restoration | Occasionally, restoration activities result in clearing of vegetation (usually to remove invasives). These areas will likely return to the inventory in a few years |
| Transportation & Communication | Roads, rail, airports, telecommunications |
| Unknown | Used to the minimum extent possible where the purpose of a development cannot be determined |
| Utilities | Energy transmission, water |

**Change**

|  |  |
| --- | --- |
| **Code** | **Description** |
| AN | Added due to natural change (an ecosystem now meets the classification requirements) |
| DN | Deleted due to natural change (e.g. an aged old field that no longer meets the classification requirements) |
| DM | Deleted due to mapping change (e.g. fixing error)[[5]](#footnote-5) |
| **Code** | **Description** |
| DH | Deleted due to human activities (an ecosystem lost due to human activities) |

**Adj09Qual**

|  |  |
| --- | --- |
| **Code** | **Description** |
| A | Excellent |
| B | Good |
| C | Moderate |
| D | Poor |
| E | Very Poor |
| N/A | For polygons with no quality score in 2009 |

**Q0914**

|  |  |
| --- | --- |
| **Code** | **Description** |
| QAll | Assessed for quality in both 2009 and 2014 |
| Q14 | Assessed for quality in 14 but not 09 |
| NQ | Not assessed for quality |

Structural Stage Definitions

(As per Land Management Handbook 25: Field Manual for Describing Terrestrial Ecosystems, 2010)

**1 Sparse/cryptogam**

Initial stages of primary and secondary succession; bryophytes and lichens often dominant, can be up to 100%; time since disturbance less than 20 years for normal forest succession, may be prolonged (50–100+ years) where there is little or no soil development (bedrock, boulder fields); total shrub and herb cover less than 20%; total tree layer cover less than 10%.

Substages:

**1a Sparse.** Less than 10% vegetation cover;

**1b Bryoid.** Bryophyte-dominated communities (greater than 1⁄2 of total vegetation cover).

**1c Lichen.** Lichen-dominated communities (greater than 1⁄2 of total vegetation cover).

**2 Herb**

Early successional stage or herbaceous communities maintained by environmental conditions or disturbance (e.g., snow fields, avalanche tracks, wetlands, grasslands, flooding, intensive grazing, intense fire damage); dominated by herbs (forbs, graminoids, ferns); some invading or residual shrubs and tress may be present; tree layer cover less than 10%, shrubby layer cover less than or equal to 20% or less than 1/3 of total cover; time since disturbance less than 20 years for normal forest succession; may herbaceous communities are perpetually maintained in this stage.

Substages:

**2a Forb-dominanted.** Herbaceous communities dominated (greater than 1⁄2 o the total herb cover) by non- graminoid herbs, including ferns.

**2b Graminoid-dominated.** Herbaceous communities dominated (greater than 1⁄2 of the total herb cover) by grasses, sedges, reeds, and rushes.

**2c Aquatic.** Herbaceous communities dominated (greater than 1⁄2 of the total herb cover) by floating or submerged aquatic plants; does not include sedges growing in marshes with standing water (which are classed as 2b).

**2d Dwarf shrub.** Communities dominated (greater than 1⁄2 of the total herb cover) by dwarf woody species such as *Phyllodoce empetriformis, Cassiope mertensiana, Cassiope tetragona, Arctostaphylos alpina, Salix reticulata,* or *Rhododendron lapponicum*. (See list of dwarf shrubs assigned to the herb layer in the Field Manual for Describing Terrestrial Ecosystems).

**3 Shrub/Herb**

Early successional stage or shrub communities maintained by environmental conditions or disturbance (e.g., snow fields, avalanche tracks, wetlands, grasslands, flooding, intensive grazing, intense fir damage); dominated by shrubby vegetation; seedlings and advance regeneration may be abundant; tree layer cover less than 10%; shrub layer cover greater than 20% or greater than or equal to 1/3 of total cover.

Substages:

**3a Low shrub.** Communities dominated by shrub layer vegetation less than 2 m tall; may be perpetuated indefinitely to environmental conditions or repeated disturbance; seedlings and advance regeneration may be abundant; time since disturbance less than 20 years for normal forest succession.

**3b Tall shrub:** Communities dominated by shrub layer vegetation that are 2–10 m tall; may be perpetuated indefinitely by environmental conditions or repeated disturbance; seedlings and advance regeneration may be abundant; time since disturbance less than 40 years for normal forest succession.

**4 Pole/Sapling**

Trees greater than 10m tall, typically dense stocked, have overtopped shrub and herb layers; younger stands are vigorous (usually greater than 10–15 years old); older stagnated stands (up to 100 years old) are also included; self-thinning and vertical structure not yet evident in the canopy – this often occurs by age 30 in vigorous broadleaf stands, which are generally younger than coniferous stand at the same structural stage; time since disturbance ins usually less than 40 years for normal forest succession; u to 100+ years for dense (5,000 - 15,000+ stems per hectare) stagnant stands.

**5 Young Forest**

Self-thinning has become evident and the forest canopy has begun differentiation into distinct layers (dominant, main canopy, and overtopped); vigorous growth and a more open stand than in the pole/sapling sate; time since disturbance is generally 40–80 years but may begin as early as age 30, depending on tree species and ecological conditions.

**6 Mature Forest**

Trees established after the last disturbance have matured; a second cycle of shade tolerant trees may have become established; understories become well developed as the canopy opens up; time since disturbance is generally 80–250 years for stands within the CWH.

**7 Old Forest**

Stands of old age with complex structure; patchy shrub and herb understories are typical; regeneration is usually of shade-tolerant species with composition similar to the overstorey; long-lived seral species may be present in some ecosystem types or edaphic sites. Old growth structural attributes will differ across biogeoclimatic units and ecosystems.

Substages:

**7a Old Forest.** Stands with moderately to well developed structural complexity; stands composed mainly of shade-tolerant and regenerating tree species, although older seral and long- lived trees from a disturbance such as fire may still dominate the upper canopy; fire- maintained stands may have a ‘single-storied’ appearance; time since stand replacing disturbance generally greater than 250 years for stands within the CWH.

**7b Very Old Forest.** Very old stands having complex structure with abundant large-sized trees, snags and coarse woody debris; snags and coarse woody debris in all stages of decomposition; stands are comprised entirely of shade-tolerant overstorey species with well- established canopy gaps; time since stand replacing disturbance generally greater than 400 years for stands within the CWH.

1. Administrative GIS fields are not included [↑](#footnote-ref-1)
2. Self explanatory fields not included [↑](#footnote-ref-2)
3. Not always available for records originating from TEM due to merging process (the Watersheds and Lynn Headwaters Regional Park). Refer to original TEM datasets for exact locations of field checked polygons [↑](#footnote-ref-3)
4. Young Forest patches of < 5 ha are not considered an SE or ME [↑](#footnote-ref-4)
5. These polygons have been removed in the final version of the database [↑](#footnote-ref-5)